

Claims

What is claimed is:

- Sub A7
1. A system for automatic detection and configuration of network parameters, comprising:
 - a first computer system for communicating to a network; and
 - at least a second computer system for providing network information;wherein the first computer system queries the network and receives the network information from the at least a second computer system before a network identification has been established for the first computer system.
 2. The system of claim 1 further comprising a storage for storing at least one configuration associated with a network interface, the first computer system configures the network interface based upon the network information received from the at least a second computer system.
 3. The system of claim 2 wherein the first computer system configures the network interface by determining a network identification associated with the network information and matching the at least one configuration with the network identification.
 4. The system of claim 2 wherein the at least one configuration is determined from previous network configurations.
 5. The system of claim 2 wherein the at least one configuration is determined from previous static configurations.
 6. The system of claim 2 wherein the at least one configuration is determined from previous dynamic configurations.

Sub A¹ 7.

7. The system of claim 1 wherein the query is a multicast.
8. The system of claim 7 wherein the multicast is addressed to a multicast Internet Protocol (IP) address.
9. The system of claim 8 wherein the source IP address is 0.0.0.0.
10. The system of claim 7 wherein the at least a second computer system responds to the multicast address *via* a Network Configuration Protocol (NCP) header.
11. The system of claim 10 wherein the NCP header further comprises a subnet address and subnet mask.
12. The system of claim 1 wherein the query is an Address Resolution Protocol (ARP) broadcast.
13. The system of claim 12 wherein the ARP broadcast is associated with a router defined in the at least one configuration.
14. The system of claim 1 wherein the first computer system interfaces to the network *via* at least one Network Interface Card (NIC).
15. The system of claim 1 wherein the first computer system further comprises a timer for determining a time to receive the network information.
16. The system of claim 1 wherein the at least a second computer system further comprises a timer for mitigating network traffic.
17. A method for automatic detection and configuration of network parameters, comprising the steps of:

Sub A7

querying a network;
receiving a response from the network; and
configuring a network interface before a network identification has been established based upon the response from the network.

18. The method of claim 17 further comprising the steps of:
determining a network identification associated with the response; and
matching at least one configuration associated with the network identification.

19. The method of claim 17 wherein the query is at least one of a multicast and a broadcast.

20. The method of claim 17 wherein the query is an Address Resolution Protocol (ARP) broadcast.

21. The method of claim 17 wherein the response is at least one of a multicast and a broadcast.

22. The method of claim 17 further comprising the step of starting a local timer to determine if a response has been received.

23. The method of claim 17 further comprising the step of starting at least one delay timer in order to mitigate network traffic.

24. A system for automatic detection and configuration of network parameters, comprising:

means for querying a network;
means for receiving a response from the network; and
means for configuring a network interface before a network identification has been established based upon the response from the network.

Sub A⁷

25. The system of claim 24 further comprising:
means for determining a network identification associated with the response; and
means for matching at least one configuration associated with the network identification.
26. A system for automatic detection and configuration of network parameters, comprising:
a first computer system having a network interface;
a storage for storing at least one configuration associated with a network; and
at least a second computer system for providing network information;
wherein the first computer system configures the network interface by determining a network identification associated with the network information received from the at least a second computer system and matching the at least one configuration with the network identification.
27. The system of claim 26 further comprising a Multiple Internet Protocol Configurations (MIPC) service for matching the at least one configuration with the network identification.
28. The system of claim 26 wherein the network interface is at least one Network Interface Card (NIC).
29. The system of claim 28 wherein the NIC is mapped to the at least one configuration by the MIPC service.
30. The system of claim 29 wherein the NIC is mapped *via* a binary table.
31. The system of claim 30 further comprising at least one configuration detector (CD) for providing an association between the NIC and the at least one configuration.

Sub A⁷

32. The system of claim 31 wherein a network operation is initiated by the configuration detector by registering the network operation with the MIPC service.
33. The system of claim 26 wherein the at least one configuration further comprises at least one of an Internet Protocol (IP) address, a subnet mask, a gateway address, a DHCP server, and a name server.
34. A system for automatic detection and configuration of network parameters, comprising:
- a first computer system having a network interface;
 - a storage for storing at least one configuration associated with a network; and
 - at least a second computer system for providing network information;
- wherein the first computer system queries the at least a second computer system *via* the network interface to receive the network information before a network identification has been established for the first computer system;
- wherein the first computer system configures the network interface by determining a network identification associated with the network information and matching the at least one configuration with the network identification.
35. The system of claim 34 wherein the query is a multicast.
36. The system of claim 34 wherein the query is an Address Resolution Protocol (ARP) broadcast.
37. The system of claim 34 wherein a third computer system determines a network configuration *via* communications from at least one of the first computer system and the second computer system.

Sub A7

38. The system of claim 34 wherein a router transmits network configuration information periodically.

39. The system of claim 34 wherein requests and responses are multicast over different addresses.

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